

CLAIMS

What is claimed is:

1 1. A filtering apparatus, comprising an inlet channel for flow to be filtered, an outlet
2 channel for filtered flow, a number of parallel filtering elements , into which flow to be
3 filtered may be directed so that infiltration occurs through a jacket of an element, and at
4 least one rotating washing organ connecting alternately to the different elements for
5 forming a discharge channel for backflushing of the elements generated with the pressure
6 of the filtered flow; and a freewheel clutch connected to a rotating axle of the washing
7 organ, wherein the clutch converts reciprocating movement generated with pressure of the
8 flow in the apparatus and alternating lower pressure into a continuously parallel, stepping
9 rotary movement of the axle.

1 2. The apparatus according to claim 1, wherein the freewheel clutch comprises a
2 coupling organ driving the rotating axle of the washing organ, which is alternately in
3 sliding contact with the axle and which alternately locks into the axle for rotating the
4 axle, the said coupling organ being articulated to the piston reciprocating on the
5 alternating pressure.

1 3. The apparatus according to claim 2, wherein in the apparatus includes channels
2 and related control valves for coupling the pressure of the filtered flow and the lower
3 counterpressure alternately to different sides of the piston.

1 4. The apparatus according to claim 3, wherein the pressure in the discharge channel
2 of the backflushing flow is coupled as counterpressure for the pressure of the filtered
3 flow.

1 5. The apparatus according to claim 1, wherein the filtering elements are cylindrical
2 and arranged on one or several circumferences surrounding the rotating axle of the
3 washing organ.

1 6. The apparatus according to claim 5, wherein the washing organ consists of one or
2 more tubular washing arms transverse to the rotating axle and connecting alternately to
3 the ends of different filtering elements

1 7. The apparatus according to claim 1, wherein the apparatus includes two or more
2 washing organs connected to the same rotating axle for simultaneous backflushing of two
3 or more filtering elements.

1 8. The apparatus according to claim 7, wherein the apparatus comprises a washing
2 organ at both ends of the parallel filtering elements, and that the washing organs are
3 made as one piece with the rotating axle.

1 9. The apparatus according to one claim 1, wherein the apparatus is adapted for
2 filtering a fuel or luboil filter of a motor, especially a luboil filter of a diesel motor.

1 10. A method for washing filtering elements in a filtering apparatus, which comprises
2 an inlet channel for flow to be filtered, an outlet channel for the filtered flow, and a
3 number of parallel filtering elements, into which the flow to be filtered is directed so that
4 infiltration occurs through an element jacket, in which method the washing is achieved by
5 connecting different elements alternately to a rotating washing organ so that the washing
6 is carried out as backflushing directed to the washing organ with the pressure of the
7 filtered flow, and a rotating axle of the washing organ is rotated in a stepping manner
8 continuously in the same direction using a reciprocating mechanism, the reciprocating
9 movement of which is generated with the pressure of the flow prevailing in the apparatus
10 and alternating lower pressure.

1 11. The method according to claim 10, wherein the axle of the washing organ is
2 rotated with the pressure of the filtered flow and with the lower pressure alternating with
3 the filtered flow pressure.

1 12. The method according to claim 10, wherein the steps of the washing organ are
2 generated with a freewheel clutch, comprising a coupling organ driving the rotating axle
3 of the washing organ, the coupling organ being alternately in sliding contact with the axle
4 and alternately locking into the axle for rotating the axle, the moving of the said coupling
5 organ being carried out with a piston articulated with the coupling organ, the piston being
6 moved back and forth by connecting the said pressures of different elements alternately to
7 different sides of the piston.